



THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Frederic Mikulec et al.

Art Unit : 1773

Serial No. : 09/625,861

Examiner : H. Le

Filed : July 26, 2000

Title : TELLURIUM-CONTAINING NANOCRYSTALLINE MATERIALS

Commissioner for Patents

Washington, D.C. 20231

RECEIVED

NOV 25 2002

TC 1700

AMENDMENT

In response to the action mailed August 22, 2002 ("Office Action"), Applicants submit the following remarks. Please amend the application as follows:

In the claims:

Please amend claims numbered 12-18, and 36-62 as follows:

~~12~~. (Amended) A population of nanocrystallites comprising a plurality of nanocrystallites, each nanocrystallite including:

a nanocrystalline core comprising MTe, wherein M is selected from the group consisting of Cd, Zn, Mg, and Hg; and

an overcoating of a semiconductor material on a surface of the core,

wherein the plurality of cores is monodisperse.

~~13~~. (Amended) The population according to claim ~~12~~, wherein each nanocrystallite photoluminesces with a quantum efficiency of at least 20%.--

~~14~~. (Amended) The population according to claim ~~12~~, wherein each nanocrystallite photoluminesces with a quantum efficiency of at least 40%.--

~~15~~. (Amended) The population according to claim ~~12~~, wherein each nanocrystallite photoluminesces with a quantum efficiency of at least 60%.--

~~16~~. (Amended) The population according to claim ~~12~~, wherein each nanocrystallite photoluminesces with a quantum efficiency of at least 70%.--

~~17~~. (Amended) The population according to claim ~~12~~, wherein the plurality of cores has a size distribution having a standard deviation no greater than 15% of a mean diameter of the population.--

~~18~~. (Amended) The population according to claim ~~12~~, wherein each core comprises CdTe.--

21

B